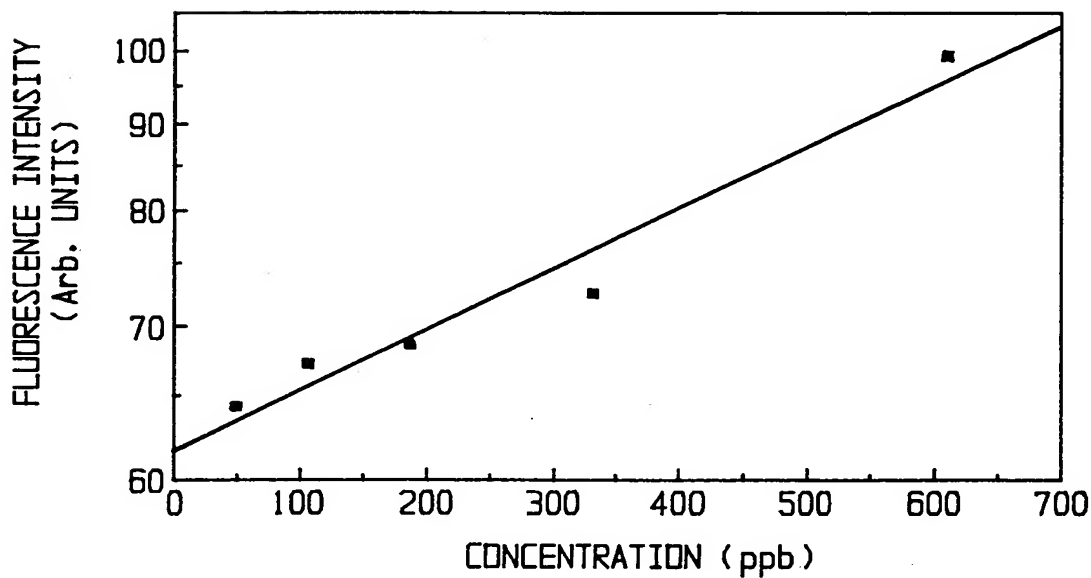
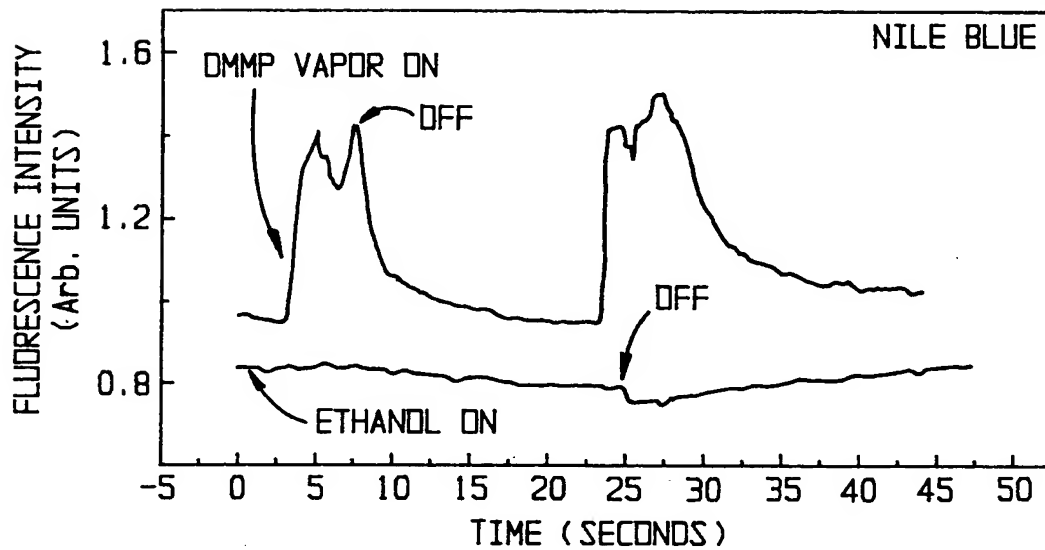
**FIG. 1**

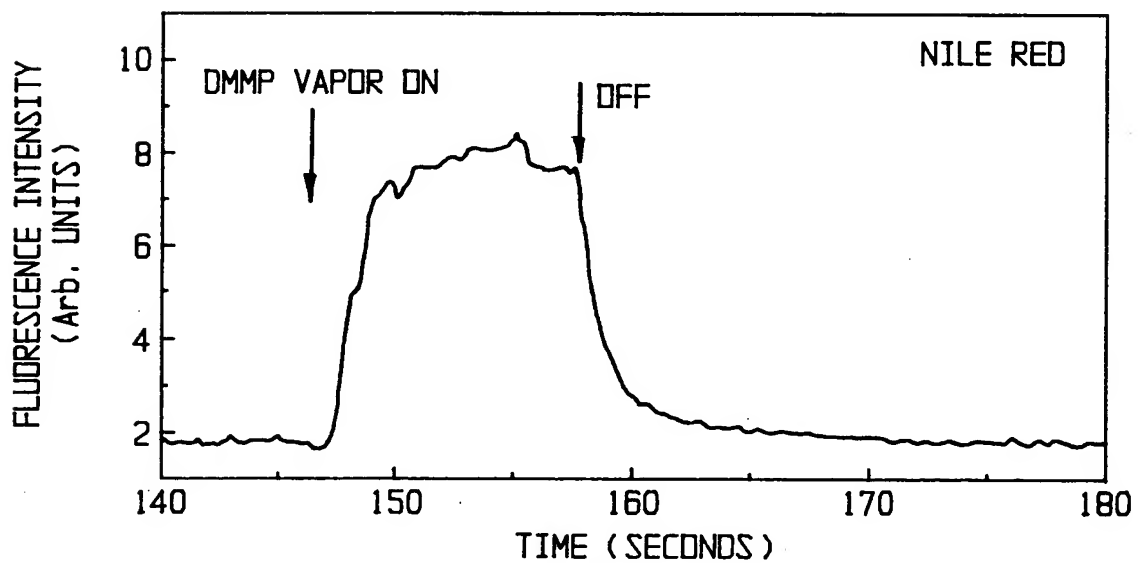
EMISSION SPECTRA OF NAFION THIN FILM CONTAINING DIIC(5) BEFORE AND AFTER EXPOSURE TO DMMP VAPOR

**FIG. 2**

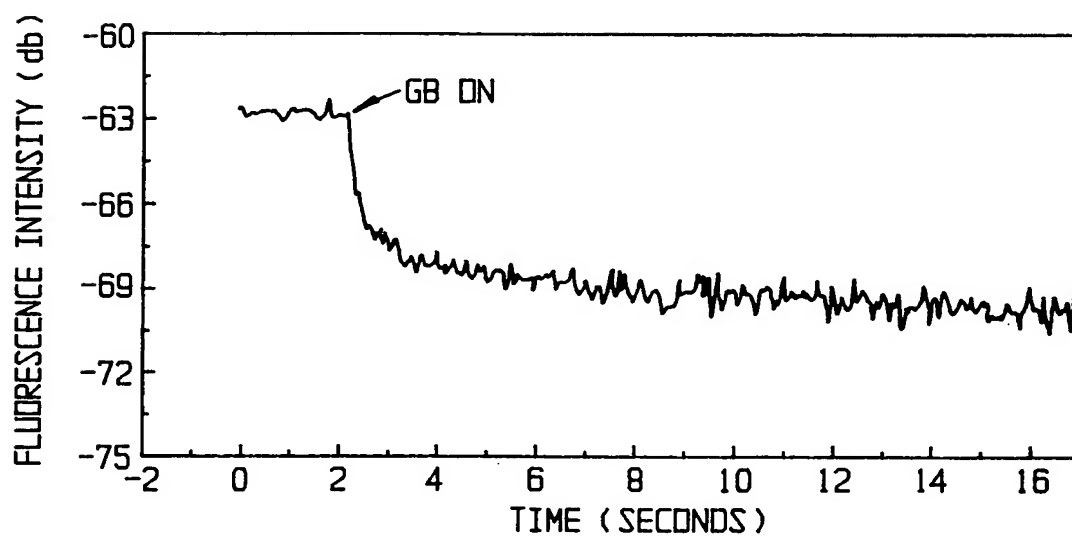
SENSITIVITY AND PROPORTIONALITY OF NAFION/DIIC(5) PROBE TO DMMP

**FIG. 3**

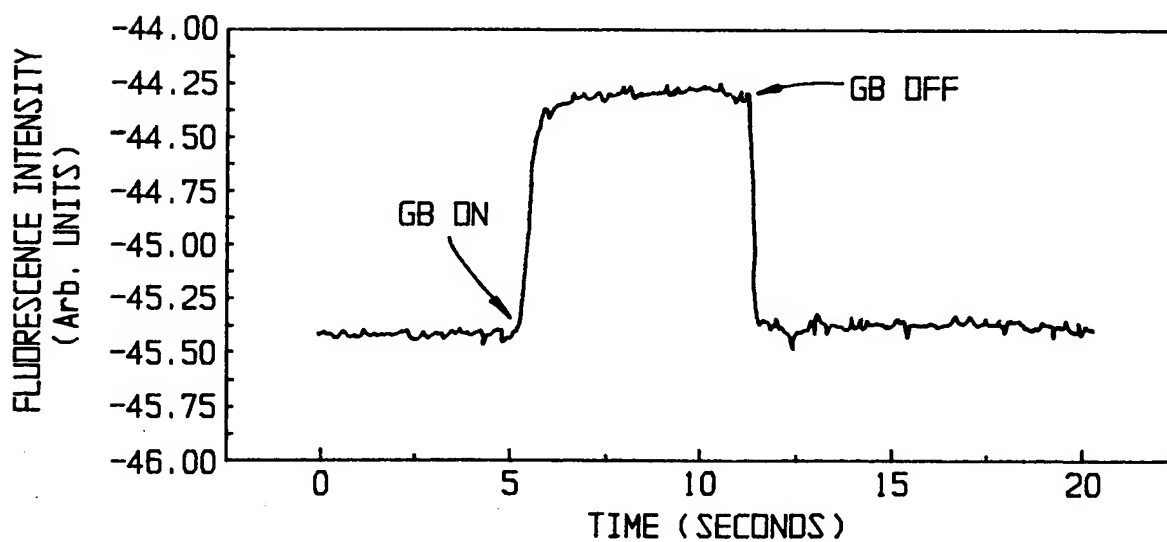
RESPONSE OF NILE BLUE DOPED  
POLYETHYLENE MALEATE FILM TO DMMP

**FIG. 4**

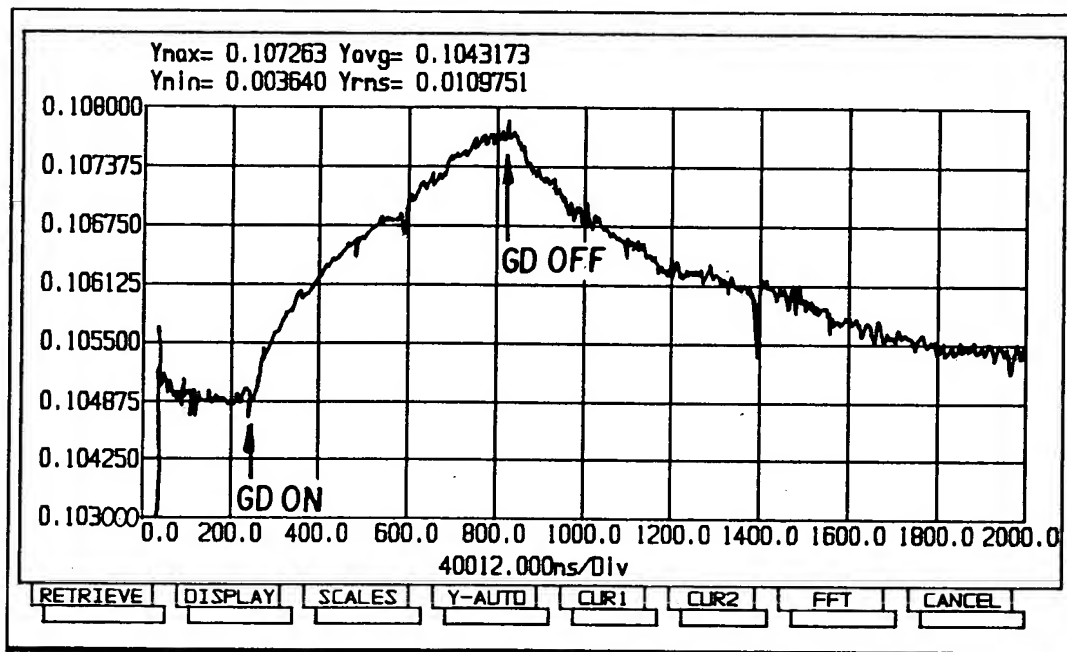
RESPONSE OF NILE RED DOPED  
POLYETHYLENE MALEATE FILM TO DMMP

**FIG. 5**

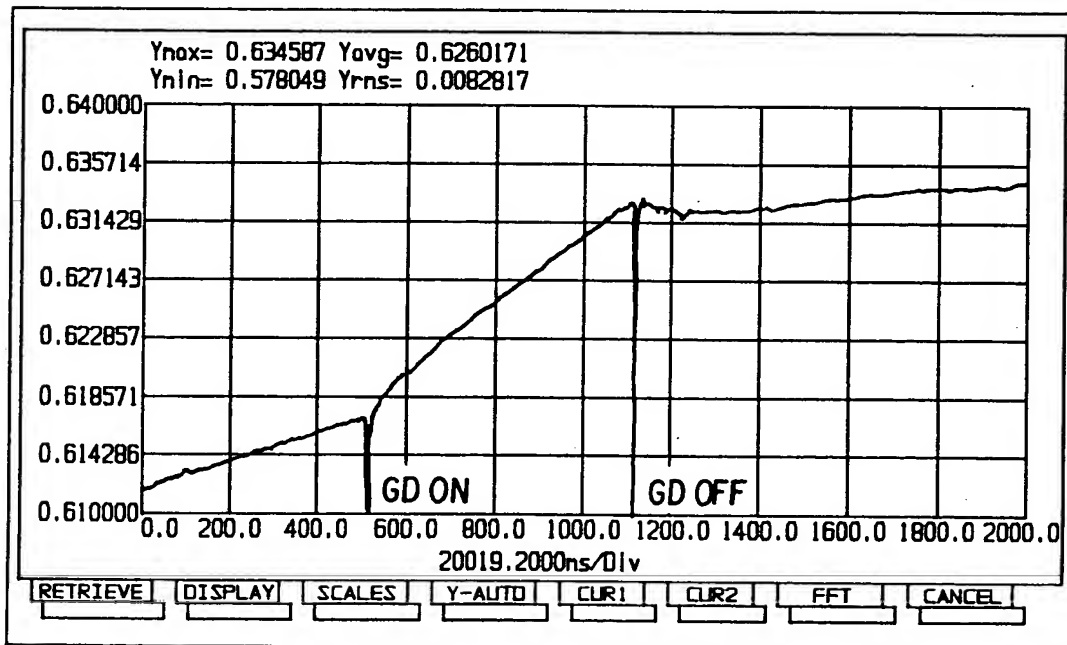
CHANGE OF FLUORESCENCE OF D11C(5) IN NAFION  
UPON EXPOSURE TO SARIN AT 0.0099mg/n3

**FIG. 6**

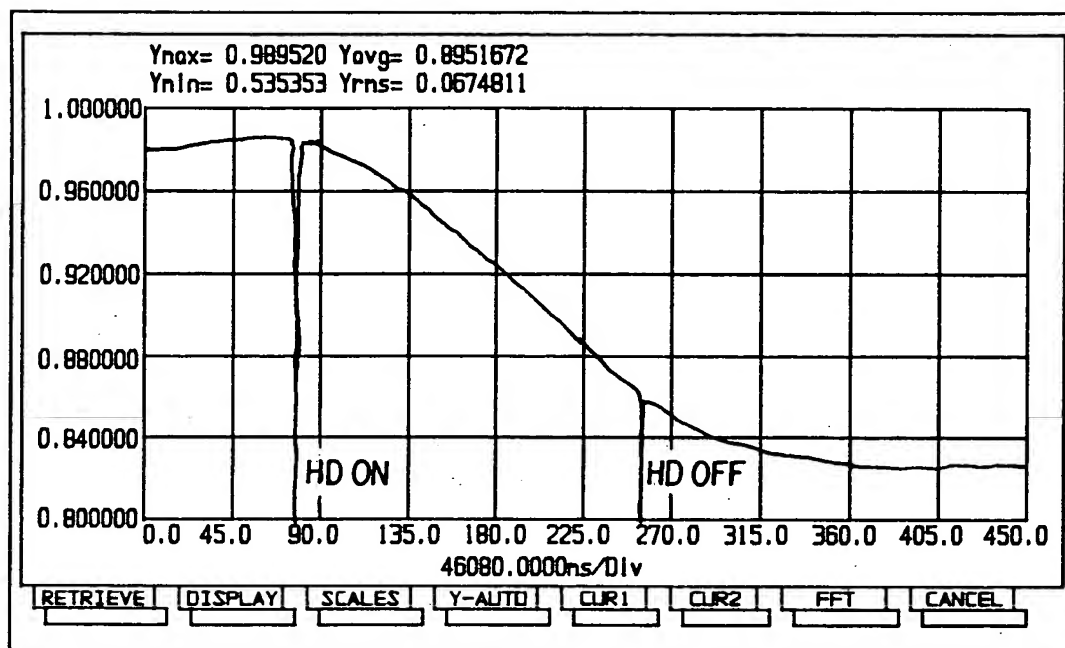
CHANGE OF FLUORESCENCE INTENSITY WHEN  
THE FILM WAS EXPOSED TO SARIN



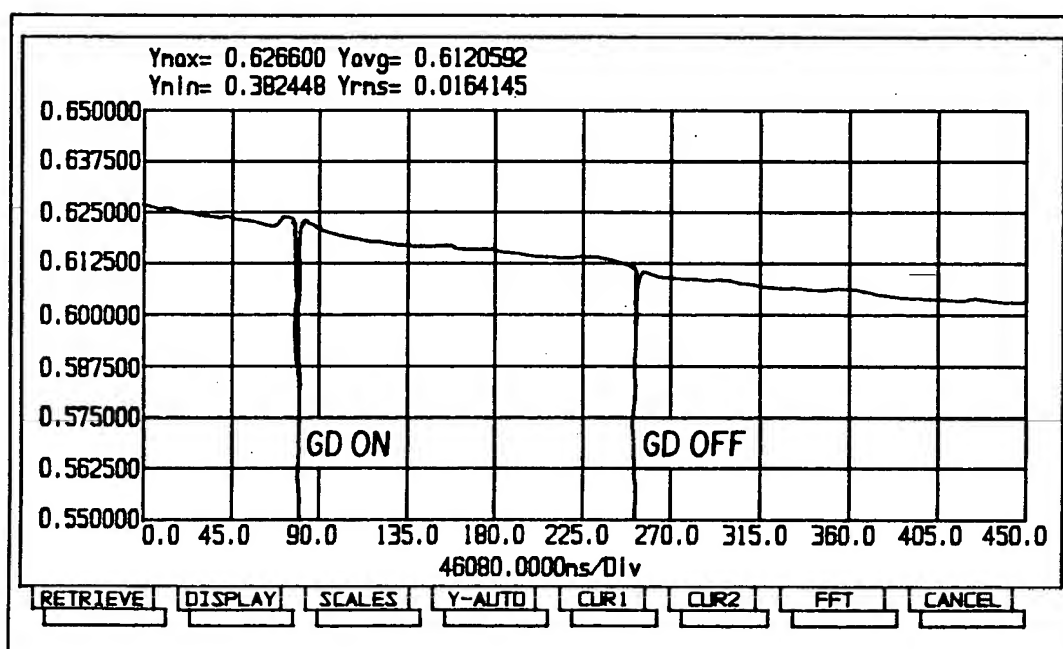
**FIG. 7** RESPONSE OF AN OXAZINE 170/FLUOROPOLYOL FILM TO GD AT 520 ppb



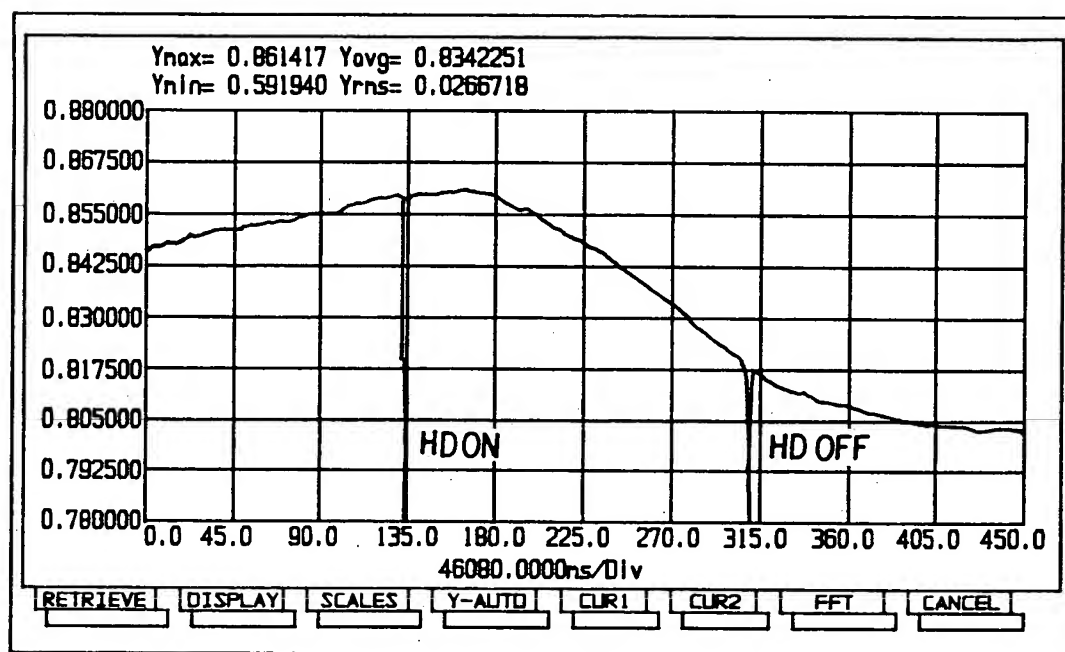
**FIG. 8** RESPONSE OF AN OXAZINE 170/FLUOROPOLYOL FILM TO GD AT 41 ppb



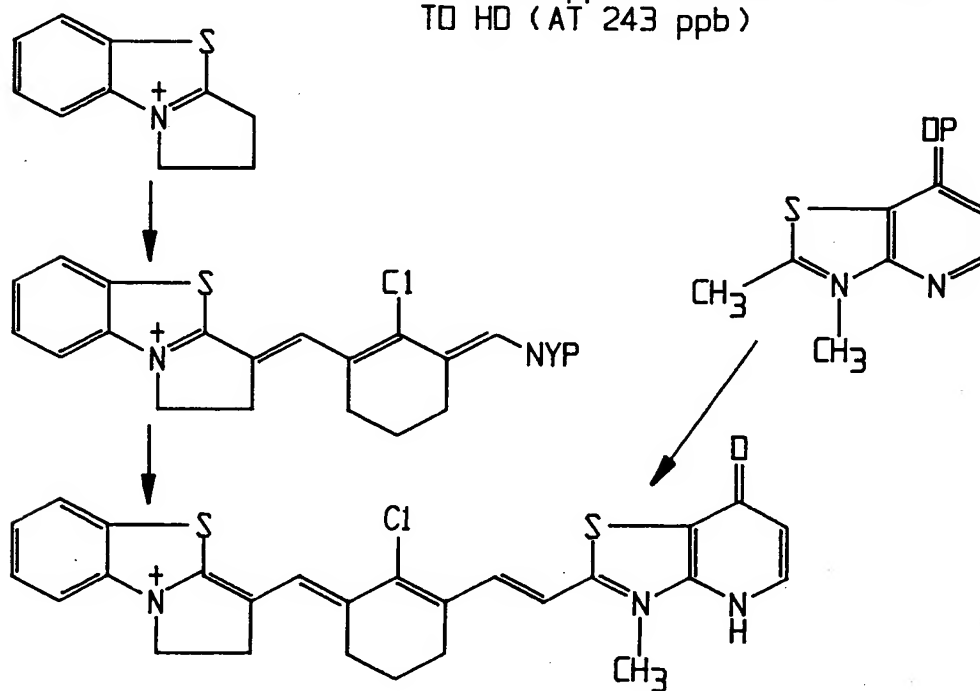
**FIG. 9A** RESPONSE OF NILE BLUE/PECH FILM TO HD  
AT 350 ppb ON 27 FEB 97



**FIG. 9B** NULL RESPONSE OF NILE BLUE/PECH FILM OF  
Figher 5a UPON EXPOSURE TO GD AT 166 ppb

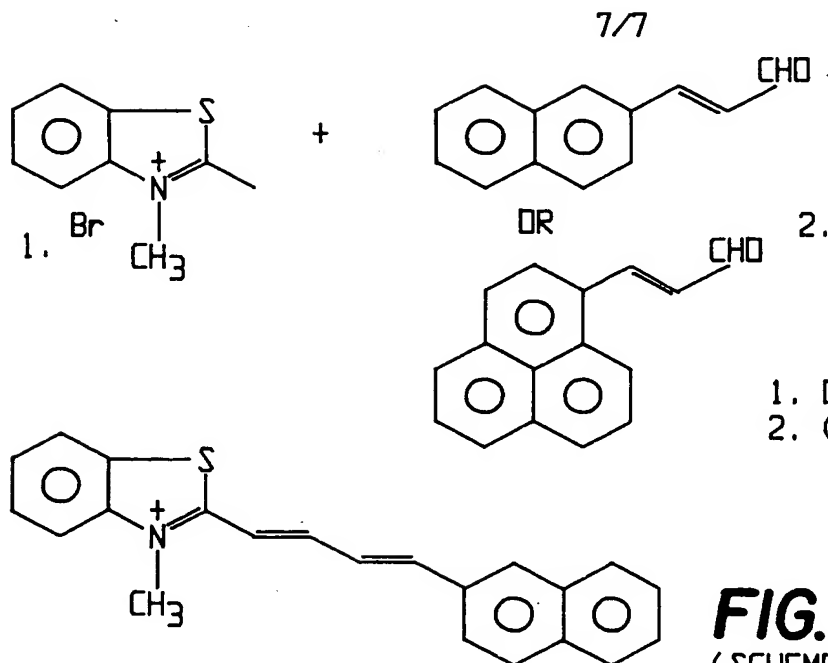


**FIG. 9C** RESPONSE OF SAME NILE BLUE/PECH FILM, AFTER EXPOSURE TO GD (AT 166 ppb) UPON RE-EXPOSURE TO HD (AT 243 ppb)



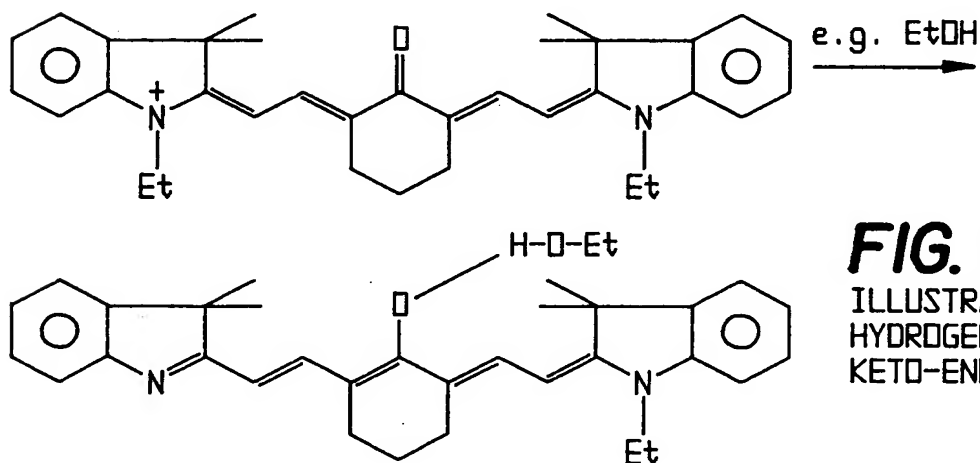
**FIG. 10**

(SCHEME 1) SYNTHESIS OF NEAR-INFRARED EXCITED SOLVATOCHROMIC FLUOROPHORE



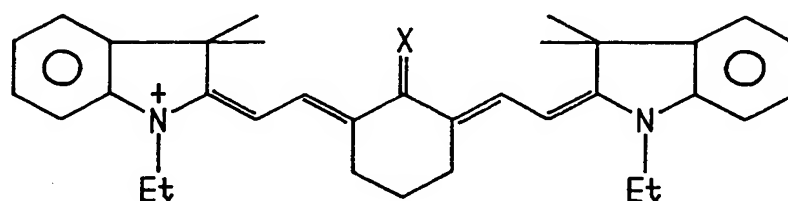
**FIG. 11**

(SCHEME II) SYNTHESIS OF ARYL  
NEAR-INFRARED EXCITED  
SOLVTOCHROMIC FLUOROPHORE



**FIG. 12**

ILLUSTRATION OF  
HYDROGEN BONDING TO  
KETO-ENDL STRUCTURES



**FIG. 13**